

PATENT SPECIFICATION

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(54) IMPROVEMENTS IN PAINT APPLYING ROLLERS

(71) We, ADLOCK ENGINEERING COMPANY LIMITED, a British Company of Groveley Lane, Northfield, Birmingham, 31, do hereby declare the invention for which we pray that a patent may be granted to us and the method by which it is to be performed to be particularly described in and by the following statement:—

10 This invention relates to improvements in applying paint to surfaces by the use of paint applying rollers of the kind in which a roller having at least one outer surface of paint absorbent material is rotatably mounted on a shaft forming a part of a handle assembly by which the roller is carried and, by manipulating the handle assembly the roller, in use, is adapted to travel rotatably over a surface to deposit a coat of paint thereon.

When a coat of paint is applied to a surface by the use of a paint applying roller of the kind set forth, depending upon the type of paint used and the texture of the surface to which it is applied, the coat is sometimes of irregular appearance, similar to the peel of an orange, hereinafter called the "orange peel effect". The orange peel effect is caused by irregularities in the outer surface of the roller and a tendency for the paint to adhere to the roller at discrete points after it has been deposited on the surface. Such orange peel effect is particularly prevalent when an oil paint is applied to wood or hardboard by the use of a roller of the kind set forth.

According to our invention paint is applied to a surface by manipulating the handle of a roller of the kind set forth to cause the roller to travel rotatably over the surface and deposit a coat of paint thereon, operating manually operable means to lock the roller against rotation relative to the shaft of the handle assembly, and manipulating the handle to

cause the locked roller to move over the surface in the manner of a brush or pad and remove any irregularities from a coat of paint previously deposited on the surface.

By this method the orange peel effect is removed and the coat is smoothed to an even appearance.

The locking of the roller relative to the shaft can be achieved by manual operation of any convenient locking means. For example, an arm or other strip detachably or pivotally connected to the handle assembly may be clamped onto the outer surface or other part of the roller. In another construction a spring loaded collar slidably keyed to the shaft at a position spaced from one end of the roller is engageable with that end of the roller.

One embodiment of our invention is illustrated in the accompanying drawings in which:—

Figure 1 is a longitudinal section through a paint applying roller; and

Figure 2 is a section on the line 2-2 of Figure 1.

The roller may comprise a sleeve of paint absorbent sponge-like synthetic plastics material mounted on and surrounding a rigid tube. Alternatively, as illustrated, the roller comprises a sleeve 1 of mohair or other fibrous tufts which extend radially outwards from a backing 2 of resilient sponge like material mounted on and surrounding the rigid tube 3.

A handle 4 is generally of the outline of a "Figure 7" and comprises a hand grip 5 from one end of which extends a metal rod 6. The rod 6 is deformed in a direction inclined at less than 90° to the axis of the hand grip and is then deformed back on itself in a reverse direction to define a straight shaft portion 7 located substantially at right angles to the hand grip 5 with the hand grip located at substantially

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in an adjacent face of the said one bearing.

7. A paint applying roller as claimed in any one of Claims 4-6, in which the collar is slidably keyed to a portion of the shaft
5 adjacent to and continuous with a deformed portion carrying a hand grip at its free end.

8. A method of applying paint to a surface substantially as herein described.

- 10 9. A paint applying roller of the kind

set forth substantially as described with reference to or as illustrated in the accompanying drawings.

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